

### **ABSTRACT OF THE DISCLOSURE**

**[51]** In a vibrational energy harvester, an external vibration causes relative motion between a permanent magnet and a magnetic field sensing element composed of a magnetostrictive material bonded to an electroactive material. The changing  
5 magnetic field causes a rotation of magnetization in the magnetostrictive material and the rotating magnetization generates a stress in the magnetostrictive material. The stress is transmitted to the electroactive material, which responds by generating electrical power.